

CLAIM AMENDMENTS

1. (Currently Amended) A method for forming a micro tip for a micro probe utilized in testing semiconductor integrated circuit devices, said method comprising the steps of:

depositing a thick oxide layer upon a substrate, wherein a thickness of said thick oxide layer is thick with respect to a thickness of said substrate; and

performing a first lithography operation upon said substrate and layers thereof following a deposition of said thick oxide layer upon said substrate;

performing a first metal sputter operation upon said substrate, following said first lithography operation performed upon said substrate and said layers thereof;

performing a chemical mechanical polishing operation upon said substrate and said layers thereof following said first metal sputter operation performed upon said substrate;

performing a second metal sputter operation upon said substrate, following said chemical mechanical polishing operation performed upon said substrate and said layers thereof; and

defining a micro tip for a microprobe from said thick oxide layer upon said substrate through a plurality of subsequent semiconductor manufacturing operations performed upon said substrate and layers thereof, wherein a plurality of said micro tips are mass produceable and can be efficiently utilized in association with increasingly smaller sizes of semiconductor integrated circuit devices.

2. (Original) The method of claim 1 further comprising the step of: adapting said micro tip of said microprobe for use with a micromachine.

3. (Original) The method of claim 1 further comprising the step of: connecting said micro tip of said microprobe to a micromachine.

4. (Original) The method of claim 1 further comprising the step of: defining said micro tip of said microprobe utilizing a plurality of micromachine manufacturing operations.

5. - 8. (cancelled)

9. (currently amended) The method of claim 8 1 further comprising the step of: performing a second lithographic operation upon said substrate and said layers thereof following said second metal sputter operation performed upon said substrate, in order to define a shape of said micro tip.

10. (Original) The method of claim 1 further comprising the step of: forming said micro tip for said micro probe on a substrate, wherein said micro tip is formed between a conductive metal layer and said substrate.

11. (Original) The method of claim 10 wherein said conductive metal layer comprises an aluminum layer.

12. (Original) The method of claim 1 wherein said substrate comprise a silicon substrate.

13. - 24. (Cancelled)

25. (previously presented) The method of claim 1 wherein the step of depositing a thick oxide layer upon a substrate, further comprises the step of:

depositing said thick oxide layer upon said substrate, wherein said thickness of said thick oxide layer comprises a thickness thereof in a range from approximately equal to at least half of said thickness of said substrate to said thickness of said substrate.

26. (previously presented) A method for forming a micro tip for a micro probe utilized in testing semiconductor integrated circuit devices, said method comprising the steps of:

depositing a thick oxide layer upon a substrate;

defining a micro tip for a microprobe from said thick oxide layer upon said substrate through a plurality of subsequent semiconductor manufacturing operations performed upon said substrate and layers thereof;

performing a first lithography operation upon said substrate and layers thereof following a deposition of said thick oxide layer upon said substrate;

performing a first metal sputter operation upon said substrate, following said first lithography operation performed upon said substrate and said layers thereof;

performing a chemical mechanical polishing operation upon said substrate and said layers thereof following said first metal sputter operation performed upon said substrate;

performing a second metal sputter operation upon said substrate, following said chemical mechanical polishing operation performed upon said substrate and said layers thereof; and

performing a second lithographic operation upon said substrate and said layers thereof following said second metal sputter operation performed upon said substrate, in order to define a shape of said micro tip, wherein a plurality of said micro tips are mass produceable and can be efficiently utilized in association with increasingly smaller sizes of semiconductor integrated circuit devices.

27. (previously presented) The method of claim 26 further comprising the step of: forming said micro tip for said micro probe on said substrate, wherein said micro tip is formed between a conductive metal layer and said substrate.

28. (previously presented) The method of claim 27 wherein said conductive metal layer comprises an aluminum layer.

29. (previously presented) The method of claim 26 wherein said substrate comprises a silicon substrate.